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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,842	08/24/2001	Jeffrey F. Harper	SCRIP1300-3	1099

7590 03/31/2005

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EXAMINER

MARTINELL, JAMES

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/938,842

Applicant(s)

HARPER ET AL.

Examiner

James Martinell

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 29, 30, 32-59, 66-70, 75 and 80-86 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 80 and 82-86 is/are allowed.
- 6) ☒ Claim(s) 1, 29, 30, 32-59, 66-70, 75, and 81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The finality of the Office action mailed September 30, 2004 is withdrawn.

The allowability of claims 46-55, 57-59, 67, 68, and 81 is withdrawn in view of the rejection under 35 USC § 112, first paragraph herein below.

The amendment filed January 31, 2005 is in improper form because material has been deleted from claim 29 without an indication that the material has been deleted. That which was deleted was "SEQ ID NOS:" from line 7. Appropriate correction is required.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 32-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2004, pages 2-4). Applicants' arguments (response filed January 31, 2005) are not convincing because the response does not address the issues under "The quantity of experimentation", "The amount of direction or guidance presented", "The presence or absence of working examples", or "The predictability of the art" sections for the polypeptides encoded by the polynucleotides mentioned in the claims.

Claims 1, 56, 66, 69, 70, and 75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague, indefinite, and incomplete.

- (a) The recitation of "representative of expressed polynucleotides in cells of the test plant" (claim 1) is vague and indefinite because it is not clear what sample might or might not be representative. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2005, page 4, item (a)). The amendment to the claims (response filed January 31, 2005) merely names the types of molecules to be

measured does not address the issue of which sequences and in what amounts or proportions might be representative.

- (b) The recitation of "as compared to a level of selective hybridization obtained using said nucleic acid molecules representative of expressed polynucleotides in cells of a plant known not to have been exposed to cold stress (claim 1) is vague and indefinite because it is not clear what sample might or might not be representative. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2005, pages 4-5, item (b)). The amendment to the claims (response filed January 31, 2005) merely names the types of molecules to be measured does not address the issue of which sequences and in what amounts or proportions might be representative.
- (c) The recitation of "improves the nutritional value" (claims 56 and 69) is vague, indefinite, and incomplete because the instant application does not define what is meant by improves. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2005, pages 5-6, item (f)). Applicants' assertions (response filed January 31, 2005) are not convincing. Applicants merely assert that one of skill in the art would know what "improved" means within the context of the claims.
- (d) The recitation of "improves the . . . ornamental value" (claim 56) is vague, indefinite, and incomplete because the instant application does not define what is meant by "improved". This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2005, page 6, item g)). Applicants' assertions (response filed January 31, 2005) are not convincing. Applicants merely assert that one of skill in the art would know what "improved" means within the context of the claims.
- (e) The recitation of "representative of an expressed polynucleotide" (claim 66) is vague and indefinite because it is not clear what sample might or might not be

representative. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2005, page 6, item (h)). Applicants are correct that in the Office action mailed September 30, 2004, claim 66 was intended to be rejected for this reason rather than claim 56. The error is regretted. The amendment to the claims (response filed January 31, 2005) merely names the types of molecules to be measured does not address the issue of which sequences and in what amounts or proportions might be representative.

- (f) The recitation of "improves the ornamental value" (claim 70) is vague, indefinite, and incomplete because the instant application does not define what is meant by "improves". This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2005, page 6, item g)). Applicants' assertions (response filed January 31, 2005) are not convincing. Applicants merely assert that one of skill in the art would know what "improved" means within the context of the claims.
- (g) The recitation of "representative of expressed polynucleotides in plant cells" (claim 75) is vague and indefinite because it is not clear what sample might or might not be representative. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2004, page 6, item (j)). The amendment to the claims (response filed January 31, 2005) merely names the types of molecules to be measured does not address the issue of which sequences and in what amounts or proportions might be representative.
- (h) The recitation of "array of probes representative of the plant cell genome" (claim 75) is vague and indefinite because it is not clear what sample might or might not be representative. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed September 30, 2004, pages 6-7, item (k)). The amendment to the claims (response filed January 31, 2005) merely names the types of molecules to be

measured does not address the issue of which sequences and in what amounts or proportions might be representative.

Claims 29, 30, 32-59, 66-70, and 81 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims are rejected for lack of an adequate written description of the genes recited in various claims as listed below. The instant application discloses that the term "gene" includes regulatory elements (*e.g.*, see pages 40-51, paragraphs 0072-0097), yet the instant application does not provide an adequate written description of the specific regulatory regions of any of the genes that comprise the SEQ ID NOs mentioned in the claims. Likewise, the instant application does not provide an adequate written description of any of the other genes or elements as listed below. Applicants' attention is directed to the "Revised Interim Written Description Guidelines Training Materials", "Synopsis of Application of Written Description Guidelines", Example No. 6 in the Written Description Guidelines to be found at [www.uspto.gov/web/menu/written.pdf](http://www.uspto.gov/web/menu/written.pdf).

- (a) Claims 29 and 46, the recitation of "gene comprising a nucleotide sequence as set forth in SEQ ID NO: 1034 or SEQ ID NO: 3729".
- (b) Claim 29, the recitation of "a plant stress-regulated gene comprising a nucleotide sequence as set forth in any of 1-155 . . . 4604-5379".
- (c) Claim 32, the recitation of "wherein the stress-regulated gene encodes a stress-regulated polypeptide".
- (d) Claim 36, the recitation of "wherein the stress-regulated gene comprises a stress-regulated regulatory element".
- (e) Claim 39, the recitation of "wherein the stress-regulated regulatory element is a mutant regulatory element, which is not responsive to the stress condition".
- (f) Claims 43, 45, and 51, the recitation of "stress-regulated gene".

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- (g) Claims 46 and 66, the recitation of "plant stress-regulated gene comprising a nucleotide sequence as set forth in any of SEQ ID NOS: 1-155 . . . 4604-5379".
- (h) Claim 48, the recitation of "endogenous stress-regulated gene".
- (i) Claim 53, the recitation of "constitutively active regulatory element, an inducible regulatory element, or a tissue specific or phase specific regulatory element".
- (j) Claims 54 and 67, the recitation of "stress regulatory element".
- (k) Claim 58, the recitation of "gene comprises a nucleotide sequence as set forth in SEQ ID NO: 1034 or SEQ ID NO: 3729".
- (l) Claim 59, the recitation of "plant stress-regulated gene regulatory element . . . comprising a nucleotide sequence as set forth in SEQ ID NO: 3729".
- (m) Claim 66, the recitation of "cold-stress regulated gene comprising a nucleotide sequence as set forth in SEQ ID NO: 1034 or SEQ ID NO: 3729".

Claims 80 and 82-86 are allowable over the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (571) 272-0719. The fax phone number for Examiner Martinell's desktop workstation is (571) 273-0719. Only documents such as those intended for use in a personal or telephone interview should be faxed to the examiner's desktop workstation. Any Official Communication to the USPTO should be faxed to (571) 273-8300.

The examiner works a flexible schedule and can be reached by phone and voice mail. Alternatively, a request for a return telephone call may be e-mailed to [james.martinell@uspto.gov](mailto:james.martinell@uspto.gov). Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (571) 272-0745.

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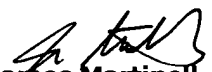
**OFFICIAL FAX NUMBER**

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any Official Communication to the USPTO should be faxed to this number.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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**James Martinell, Ph.D.**  
**Primary Examiner**  
**Art Unit 1634** 3/25/05